DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-016101 Address: 333 Burma Road **Date Inspected:** 03-Aug-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Bay 4

Summary of Items Observed:

On this day Caltrans OSM Quality Assurance (QA) Inspector Christopher D'souza was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China. QA Inspector observed and/or found the following:

Bay 9

Welding of Continuity plates on DP3158 – 001 and DP3167 – 001

This QA Inspector observed ZPMC welding personals identified as 059403 and 059466 performing Flux Cored Arc welding (FCAW) on DP3158-001 U-rib internal stiffeners. ZPMC QC is identified as Chen Shi Gang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133 and WPS – B – T – 2233 – Tc - U4b - F(CJP)

This QA Inspector observed ZPMC welding personals identified as 059416 and 059464 performing Flux Cored Arc welding (FCAW) on DP3167-001 U-rib internal stiffeners. ZPMC QC is identified as Chen Shi Gang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133 and WPS – B – T – 2233 – Tc - U4b - F(CJP)

QA Inspector performed Phased Array Ultrasonic Testing (PAUT) following the guide lines of UT procedure titled "Phased Array Ultrasonic Testing for the Detection and Sizing of Suspected Planar Discontinuities (Cracks)

WELDING INSPECTION REPORT

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in PJP Welds, # UT 04-0120F4 PJP Rib Weld" after ZPMC welding personnel performed weld repairs of tacked areas of the Partial Joint Penetration (PJP) welds joining u-ribs to deck plate. The deck panels examined are as follows:

DP3132-001: 1 tack weld locations found compliant and 0 tack weld locations found non-compliant.

Tack weld locations found non-compliant are marked on U-rib and deck plate for ZPMC's reference for repair. See Caltrans U-rib to Deck Panel- Tack Weld Assessment sheets dated 4th August, 2010 for further information on PAUT inspections.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Dsouza, Christopher	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer